

Response to Arguments

Applicant's arguments filed 11/06/2009 have been fully considered but they are not persuasive. Applicant argues that Kaizuka (US 6396507) does not show or disclose the enlargement of a partial image that corresponds to a search query and composition of the enlarged partial image onto a displayed searched image on page 9, the examiner disagrees. Kaizuka clearly shows in Fig 3A an image element 31 which meets the limitation of a searched image. Element 32 meets the limitation of a partial image having a feature (character or text or alphabet D) which is enlarged based on the request from the user (query) at col 12 lines 10-21. Fig 3C shows the displaying of the enlarged partial image D displayed on top of the searched image containing the alphabets meeting the limitations of claim 1, 18 and 22. In view of the amendments the claims have been rejected as follows.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 7, 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niblack et al (US 6182069) hereafter Niblack in view of Kaizuka et al. (US 6396507) hereafter Kaizuka.

Regarding claim 1, Niblack discloses an image search apparatus (**Fig 1**) which searches for an image, the apparatus comprising:

image storage means for storing a plurality of images (**Fig 1 Element 36 which stores pluralities of images**);

region information storage means (**Fig 1 Element 34 which stores thumbnails or partial images**) for storing partial images included in the respective images stored in said image storage means in correspondence with the respective images;

region feature storage means (**Fig 1 Element 35 which stores image features of the partial images or thumbnails**) for storing features of the partial images stored said region information storage means in correspondence with the respective partial images;

receiving (**query search in the QBIC**) means for receiving a feature as a search condition to search for the target image (**Fig 1 Element 23 which is query window used for receiving the search condition Col 3 Lines 54-55**).

Niblack discloses the display (**Fig 1 Element 13 to display the searched image**). Niblack however does not expressly recite search means for searching for a searched image, the searched image including the partial image containing a feature corresponding to the search query , the partial image being different from the searched image; and search result display means for displaying the searched image, enlarging the included partial image containing the feature corresponding to the search query, and composing the enlarged partial image on

top of the displayed searched image, wherein the displayed searched image is different from the enlarged partial image.

Kaizuka discloses search means for searching for a searched image (**a request for a designated region to be enlarged on an image currently displayed at the client side at col 9 lines 56-60 which meets the limitation of searched image and the searched image including the partial image containing a feature corresponding to the search query (figs 3a-3c shows the alphabet D which is the partial image included in the searched image being enlarged))**), the partial image being different from the searched image (**Figs 3a-3c which shows the partial image D different from the searched image**); and search result display means for displaying the searched image, enlarging the included partial image containing the feature corresponding to the search query (**Figs 3a-3c which shows the partial image D different from the searched image**), and composing the enlarged partial image on top of the displayed searched image (**Figs 3a-3c which shows the partial image D different from the searched image displayed on top of the image 31**), wherein the displayed searched image is different from the enlarged partial image (**Figs 3a-3c which shows the partial image D different from the searched image displayed on top of the image 31**). Kaizuka discloses the apparatus and the image processing carried out by displaying a large thumbnail of the searched image with the searched image as seen in fig 3 and at paras 0033-0034 reduces the burden of searching and provide a more easily examined

image set (**motivation in para 0008**). Kaizuka discloses that an arbitrary region (partial image) can be freely enlarged without increasing the storage capacity at (col 12 lines 39-41). Kaizuka and Niblack are from the same field of endeavor and are analogous art, therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to generate enlarged view of the partial images with searched image together as taught by Kaizuka in the apparatus of Niblack for the above reasons.

Regarding Claim 2, Niblack and Kaizuka disclose the apparatus according to claim 1. Niblack further discloses wherein when a plurality of searched images are obtained on the basis of a search result and plurality of searched images in the form of a list (**Element 13, Fig 6 Col 8 Lines 29-42, fig 9 Col 10 Lines 17-25 and Col 18 Lines 24-28**). Kaizuka discloses the display means for displaying the plurality of searched images at Col 11 lines 40-45. Thus Kaizuka and Niblack together would achieve the invention of claim 2.

Regarding claim 7, Niblack and Kaizuka disclose the apparatus according to claim 1. Kaizuka discloses further the size of the partial image at **Col 14 line 22-23**. Kaizuka further disclose the display of the searched partial image and the enlarged thumbnail of the searched image together (unified or brought together) to a predetermined size of display (**Figs 3C where both the images are displayed one on top of the other meeting the claim limitation**).

Claim 18 is a corresponding method claim of Claim 1. See the explanation of Claim 1.

Claim 22 is a corresponding computer readable recording medium claim of Claim 1. See the explanation of Claim 1.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niblack in view of Kaizuka and in further view of Tanaka et al (US 6513035) hereafter Tanaka.

Regarding claim 5, Niblack and Kaizuka disclose the apparatus according to claim 1. Niblack and Kaizuka are silent and do not recite in exact claim language wherein said search result display means composes a plurality of partial images while maintaining a relative positional relationship between the plurality of partial images.

Tanaka discloses displaying plurality of thumbnails (partial images) based on the search results while maintaining predetermined positional relationship as seen in figs 7-8. Tanaka discloses that the thumbnails are displayed in the form of the list and since the number of thumbnail images has been narrowed down a desired image can be found quickly and in simple manner at **Col 9 lines 3-7**.

Niblack, Kaizuka and Tanaka are from the same field of endeavor and are

analogous art, therefore it would be obvious for one of ordinary skill in the art at the time of the invention was made to have used the teachings of Tanaka in the apparatus of Niblack and Kaizuka for the above reasons.

Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niblack in view of Kaizuka and in further view of Karaki et al (US 5612715) hereafter Karaki.

Regarding Claim 13, Niblack and Kaizuka disclose the apparatus according to claim 1. Kaizuka discloses the display as seen in Figs 3a-3c. Niblack and Kaizuka are silent and however do not expressly disclose wherein the apparatus further comprises switching means for switching display of a plurality of searched images in said search result display means, and said search result display means alternately displays the plurality of searched images at the same position one by one on the basis of a switching instruction from said switching means.

Karaki discloses display switching means (**M25 Fig 3, Figs 14a-14c, Col 10 lines 34-36 where pluralities of images are switched between the screens**). Karaki disclose that the switching display view improves the viewability of the user at (**Col 10 lines 13**) in a plurality of images being viewed. Niblack, Kaizuka and Karaki are from the same field of endeavor and are analogous art, therefore it would be obvious for one of ordinary skill in the art at the time the

invention was made to have increase the view ability of the user in the apparatus of Niblack and Kaizuka for the above reasons.

Regarding Claim 14, Niblack and Kaizuka disclose the apparatus according to claim 1. Niblack and Kaizuka both disclose the image being displayed.

Kaizuka discloses further the size of the partial image at **Col 14 line 22-23**.

Kaizuka further disclose the display of the searched partial image and the enlarged thumbnail of the searched image together (unified or brought together) to a predetermined size of display (**Figs 3C where both the images are displayed one on top of the other meeting the claim limitation**).

Regarding Claim 15, See (**Figs 14a-14c**) in Karaki where the partial images are circumscribed with a rectangle.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niblack in view of Kaizuka and in further view of Brown et al. (US 6356908) hereafter Brown.

Regarding Claim 17, Niblack and Kaizuka discloses the apparatus according to claim 1. Niblack also disclose region feature storage means stores, as a feature of the image, at least one of concept information expressing a concept obtained from the partial image in (**Fig 5**). Niblack however do not disclose wherein the

region feature storage means stores, as a feature of the image, at least one of concept information expressing the concept obtained from the partial image, text information expressing the concept of the partial image and an image feature expressing a feature of the partial image.

Brown discloses wherein the region feature storage means stores, as a feature of the image, at least one of concept information expressing the concept obtained from the partial image, text information expressing the concept of the partial image and an image feature expressing a feature of the partial image.

(Fig 5,6 and Figs 9 and 10). Brown discloses presenting a set of thumbnail images of the linked pages in the database near the links to the linked pages at **(Col 2 Lines 18-20)**. Niblack, Kaizuka and Brown are combinable because they are from the same field of endeavor and are analogous art. The suggestion/motivation would be that a textual name followed by a short textual description of the linked page does not provide sufficient information to enable one to make an intelligent decision as to open the link at **(Col 1 Lines 55-59)** disclosed by Brown. Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the teachings of Brown in the Query system and method of Niblack and Kaizuka to get the claimed invention.

Other cited prior art

The other relevant prior art to the subject matter not relied on are (US 7069506), (US 20030014445) and (US 5838837).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAYESH PATEL whose telephone number is (571)270-1227. The examiner can normally be reached on 5-4-9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on 571-272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

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